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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,305	12/21/2001	Philipp Hortig	HORTIG	6538

20151 7590 11/14/2003
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EXAMINER

EASTHOM, KARL D

ART UNIT PAPER NUMBER

2832

DATE MAILED: 11/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/032,305	Applicant(s) HORTIG ET AL.	
	Examiner Karl D Easthom	Art Unit 2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-5, 7-20 and 22-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-5, 7-20 and 22-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 2-5, 7-20, and 22-27 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no description adequate to describe how the control element 2 moves to interact with the transducers. Thus in claim 19, there is no description for how the applied force gets from the handle to the transducer. In claim 27, there is no description for how the transducer and control element are coupled to convert a manual force. Moreover, description lacks for how the control element (handle) 2 is prestressed. Even though the description says the spring 12 biases it, it is not seen how it is biased because there is a lacking description as to how the control element 2 even gets acted upon by that spring, much less a picture of it. Nor is there any depiction of how the handle and rod are interconnected. Fig. 1 reveals no moving part for the control element 2. Nor does Fig. 3 or Fig. 6. The other figures do not list element 2. For claims 14 and 26 there is no description for how the control element interacts with the three elements. Fig. 2 discloses a pivot point 19 as an alternative. This does not describe how the force is transmitted to 5 since the element 2, if it pivots, would not pivot perpendicular to the surface of 5. As to Fig. 6, there are not two pivot points for action against the x and y transducers, and the z transducer is secured to the housing 2 as it appears. Thus there is no description exists as to how the element 2 moves to create a force.

Finally, there is no description as to how the element 2 can both slide with respect to rod 4, and pivot thereabout. That is, the actions are described independently, but how they are accomplished together is not described. One would seem to preclude the other. Nor is it seen how the element can pivot. Finally, in claim 27, adequate description lacks for an actuating element accessible from the outside and actuated by the control element, or how the control element is supported by the pushrod.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 4, 7- 9, 11, 12 15-16, 19, 23, 25 and 27 under 35 U.S.C. 102(b) as being anticipated by David et al. David discloses the claimed invention at Fig. 2 where the control element 34, 12 is configured as a handle, with biasing means 12 or 37 prestressing same parallel to the downwards direction, pushrod 31, actuating element 34, and transducer element comprising the diaphragm with resistors Ja-Jd, the transducer acted on independently since it is only one. In claim 7, the housing is seen at Fig. 2 comprising 13. In claims 8 and 21, the arms of the diaphragm are elastic and are the second elastic member, and all parts are connected so as to support each other, and the arms are in opposition to the spring since they are biased to not move downward or upward. In claims 9 and 11, there is displacement along the longitudinal axis and the resistor direction is transverse thereto. Elements 13d or 31 are the tubes of claim 12, and a cable is attached to one end at Fig. 1, with a load receiving member 34, 35, etc., each one taking the load of force from an operator. In claim 15, the handle is a barrier

to light as opaque and delivers an operating signal when embraced. In claim 16, there is no signal absent force. In claim 19, one spring 12 can supply force upwards, and the other 37 can supply force downwards, when stressed. In claim 23, the actuating member is 35.

5. Claims 19 and 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Norton et al. Norton discloses the claimed invention at Fig. 1 where the control element 18, 19 or 11 is configured as a handle, with biasing means 56, 57 prestressing same in the upwards and downwards direction, and transducer 40, 41 including resistive forces sensor and having a sensor surface. In claims 22-23, the springs 56 meet the claims. In claim 23, 51 is an actuating element.

6. Claims 2, 9, 11, 14, 16 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Sharp et al. Sharp discloses the claimed invention at Fig. 14 with force sensitive transducers 118 extending perpendicular to the biasing means 108- electrometric spacers. The control element 112 is configured as a handle, with pushrod 110, and actuating element the arms connected thereto. In claim 2, the push rod is curved. In claims 9 and 11, the sensor surface is perpendicular. In claim 14 and 26, the three orthogonal directions are x,y, and z where 114 is the z directed transducer. In claim 16, lack of movement means lack of signal

7. Applicant's arguments filed 10/11/03 have been fully considered but they are not persuasive. Applicant argues that there is description for how the control element 2 acts upon the transducers 5. This is not correct, as noted above. First, applicant states that the pivoting action in Fig. 2 shows actuation in the direction of plane X. This is not correct. The plane X transducer is shown in Fig. 2. Figs. 2-3 do not show the Z directed transducer. Par. 29 states that the control element 2 is embraced by the hand and acted upon by a force by the hand. Figs.

2-4 describe an X directed transducer as noted in par. 30. Par 34 describes the pivot axis 19, which could allow the handle or control element to pivot, but this, in no way is described as the method by which force is transferred to any transducer, and moreover, would not transfer force to the X transducer 5 in Fig. 2, since it requires a force parallel to the pivot axis. Applicant also appears to argue there are two pivot points, one for Z and one for X. There is absolutely no support for this. As to the Y transducer, applicant points out that the handle slides in relation to the tube. This does not describe how force gets to the Y transducer, since it is described as only attached to the housing 18, and presumable would slide with it. And further, in Fig. 6, there are not two pivot points for action against the x and y transducers, and the z transducer is secured to the housing 2 as it appears. Thus there is no description exists as to how the element 2 moves to create a force. Finally, there is no description as to how the element 2 can both slide with respect to rod 4, and pivot thereabout. That is, the actions are described, but how they are accomplished is not described, and how the force gets to the transducers is not described.

8. As to the 102 rejections, applicant argues that David et al. does not disclose independent operation of transducers. This is not correct, where there is only one transducer comprising resistors connected in a bridge circuit. The biasing means for claim 19 are as noted. As to Norton, applicant argues claim 27 is not disclosed. This is persuasive. Claim 19 appears to be admitted by lack of argument. DeVolpi has been removed due to persuasive arguments and because for claim 19 the force transducer is not disposed in the handle, contrary to any earlier indications by the examiners, and the handle is not supported by a pushrod via an elastic member. For Sharp et al., primarily as to claim 19, the force transducer is not disposed in the

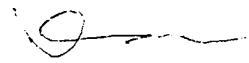
handle, nor are there two elastic members in opposition to each other. For claim 27, see the remarks above.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl Easthom whose telephone number is (703)308-3306. The examiner can normally be reached on M-Th. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad, can be reached on (703)308-7619. The fax phone number for the organization where this application or proceeding is assigned is (703)308-7722. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.


KARL D. EASTHOM
PRIMARY EXAMINER